Item	Vol. or Page	Drawing or Section Number	Comment/Question	Date	Response	Attach (Y/N)	Addendum Number	Date Closed
43	BA1.2	111, 112	Where is the construction specification for the TSI controller at each fumehood exhaust valve? The equipment schedules only references a model number with no detailed callout.	5/21/2003	1. The TSI reference is for an exhaust control box with a flow cross. The appropriate data sheet will provide the necessary information. There is NO controller associated with the TSI part number.2. The	N	5	6/11/2003
			2) Where is the specification for the delta P transmitter?		Delta P transmitter is located in the Laboratory Room Controller (LRC).3. Reference Seimens Laboratory Control System manual, entitled			
			3) Where is the specification for the AOP module?		"Siemems Laboratory Control and Safety			
			4) Where is the specification for the exhaust air damper and the damper actuator?		Applications".4. The exhaust air damper is the TSI reference, reference Siemens Laboratory Control			
			5) Where is the specification for the Laboratory Room Controller (LRC)?		System manual for the actuator.5. Reference Siemens Laboratory Control System Manual.6. Reference Siemens Laboratory Control System			
			6) What is the FFM? Where is it specified?		Manual.7. Reference Siemens Laboratory Control			
			7) Where is the specification for the occupancy switch, occupancy indicator and the local alarm indicator?		System Manual.8. FLN LAN connection Reference Siemens Laboratory Control System Manual.			
			8) Define the connection to the computer from the LRC. Is it a LAN connection the the FCS or is it to a separate computer system?					
56	Mechanical/Co ntrols Vol. BA1.2	Drawing	The laboratory control system does not match the mechanical duct layout by not addressing the time when we have two or more general exhaust VAV boxes and only one supply VAV box to a single Lab. The current detail only shows a one to one (supply to general exhaust) relationship. The design should show how these boxes are daisy-chained together across a LAN (FLN). Also, the general exhaust VAV boxes are drawn backwards. The flow cross and damper control should be on the inlet side of the VAV box, not the outlet side as drawn.	5/27/2003	Each Lab Module is designed for two hoods, one general exhaust and one supply. If a lab has less than two hoods, the unused hood controller is set to zero.	N	5	6/11/2003
59	MH1013858EL General Note # 2	Drawing	Drawing MH1013858EL General Note # 2. Should this read "Supply Air Duct shall be acoustically lined for the first ten feet from the outlet of the terminal unit" as there is not any return air at the terminal units?	5/28/2003	Other than supply ductwork, ductwork in lab areas is exhaust ductwork and ductwork in office areas is return ductwork. The symbol sheet will be amended and reissued to help clarify this issue.	N	5	6/11/2003
71	Sequence # 048 (Mark E4101, E4102, etc.)	Drawing	The TSI exhaust valves listed on Drawing Sequence # 048 (Mark E4101, E4102, etc.), are not listed by a valid model number. On Drawing Sequence # 012, one of these exhaust valves is depicted as a	6/3/2003	Reference Metalarre 400 RT. It is up to the prime contractor to determine the sub-contractor.	N	5	6/11/2003

Itom	Vol. or Page	Drawing or Section Number	Comment/Question	Date	Response	Attach (Y/N)	Addendum Number	Date Closed
item	Voi. of Page	Section Number	"venturi" type valve. On Drawing Sequence # 111, it appears that a round control damper is used.		Kespunse	(1/14)	Number	Closed
			Please clarify whether these are round dampers or venturi valves Is there a corresponding specification? I could not locate one. Are they in the Controls contract or Sheet Metal contract?					
76	15720S-2 – 1.04 submittals C	Specification	15720S-2 – 1.04 submittals C All fans are based on AMCA standards and conducted in a AMCA approved laboratory, is this acceptable?	6/3/2003	This is acceptable - Change ARI to AMCA	N	5	6/11/2003
77	15720S-2 – 1.04 submittals D	Specification	We will provide, per ASHRAE standards, calculations for both fan outlet and casing radiation sound power levels based on tests from an AMCA certified laboratory. Is this acceptable?	6/3/2003	This is acceptable	N	5	6/11/2003
78	15720S-2 – 1.05 quality assurance A	Specification	Our units will not bear the ARI 430 certified rating seal. I believe all custom manufacturers do not have this as well. All ARI 430 ratings are typically on mass produced DX units. We will test our coils in accordance with ARI 410. And, provide an ETL label for the entire unit. Is this acceptable?		This is acceptable	N	5	6/11/2003
79	15720S-2 – 1.06 delivery, storage, and handling A	Specification	Is it acceptable to cover all of the openings, install door latches so that the doors can not be opened during shipping, and install shipping blocks on all internally isolated fans in lieu of fabricating a protective container for the units?	6/3/2003	Acceptable with the addition of shrink wrap and overall weather proof covering.	N	5	6/11/2003
80	15720S-2 – 2.02 casing A	Specification	Our unit base frame is made of structural steel with additional supports for the fans, coils, etc. Our framework is designed to prevent pulsations. Is this acceptable?	6/3/2003	This is an acceptable arrangement	N	5	6/11/2003
81	15720S-2 – 2.02 casing C	Specification	We would like to provide the Lever-lock handles in lieu of the Vent-Loc's. The Lever-lock handle is far superior to the vent-loc because the gasket is	6/3/2003	Provide specified handles	N	5	6/11/2003

Item	Vol. or Page	Drawing or Section Number	Comment/Question	Date	Response	Attach (Y/N)	Addendum Number	Date Closed
			compressed twice as much with about 2 times less resistance to close the handle. Is this acceptable?					
82	15720S-2 – 2.05 coils E	Specification	The drawings state 12 fins per inch, the specification states 10 fins per inch max. Which is correct?	6/3/2003	Provide coil that has proper capacity with 10 or 12 FPI.	N	5	6/11/2003
85	sheets AE1008858EL, AE1048858EL, and AE13001858E L	Drawing	Reference the drawings, sheets AE1008858EL, AE1048858EL, and AE13001858EL. The two referenced enlarged floor plans show a wall type L at the stairs. This wall type is not shown or described on the partition sections and details sheet. Please provide a detail and description for wall type L.	6/3/2003	All walls at Stair 5 are wall type E1.	N	5	6/11/2003
86	section 5550S Steel Stacks	Specification	Reference specification section 5550S Steel Stacks: Does this spec apply to this project? The three (3) exhaust stacks that are indicated on the mechanical drawing appear to be just extensions of the ductwork. They are not depicted at all like they were for the MicroFab project. Please clarify.	6/3/2003	Specification section 05550S does not apply to the MicroLab project.	N	5	6/11/2003
87	sheet CP5201	Specification	Please provide the specifications that are needed to perform the work associated with the screen wall delineated on sheet CP5201.	6/3/2003	Use Specifications 03300S and 04220S	N	5	6/11/2003
91	Sheet SF1015858EL	Section	Sheet SF1015858EL shows joists J10 between column lines G & F to be 9" (scaled). Joist schedule calls for J10 to be 6" joist. Please clarify.	6/3/2003	Use joist schedule - 8" joist width in schedule is correct.	N	5	6/11/2003
95	AE1047858EL (sequence 110)	Drawing	Reference drawing AE1047858EL (sequence 110). Grid H2 indicates a detail blowup (3/AE4005) of the entrance to the penthouse. This detail is not provided on drawing AE4005. Note that drawing AE4006, detail 4 indicates similar information. Please clarify.	6/3/2003	Use AE4006858EL, detail 4	N	5	6/11/2003
96	Reference the partial floor plans for levels 1, 2 & 3. In addition, reference areas C, D, H and J in the key plan by the title block	Section	Reference the partial floor plans for levels 1, 2 & 3. In addition, reference areas C, D, H and J in the key plan by the title block. Several of the offices facing the corridors in these areas indicate a wall with hollow metal windows (i.e. drawing AE1014858EL or sequence 084, grid line D between grids 3 and 5), but do not indicate an elevation reference. Please clarify by providing elevation references	6/3/2003	Refer to AE2101, details 16-21	N	5	6/11/2003

Item	Vol. or Page	Drawing or Section Number	Comment/Question	Date	Response	Attach (Y/N)	Addendum Number	Date Closed
97	Sections 07810S Applied Fireproofing and 07814S Interior Intumescent Fireproofing	Specification	Reference Specification Sections 07810S Applied Fireproofing and 07814S Interior Intumescent Fireproofing. The drawings do not indicate any location. Please clarify.	6/3/2003	All exposed steel in Design and Education Center, Penthouse and Elevator Equipment Room.	N	5	6/11/2003
98	sheet AE4005 (Sequence 132) stairway #5	Drawing	Reference Drawing sheet AE4005 (Sequence 132) stairway #5. The 2nd, 3rd, and penthouse levels indicate a louver in the North wall. Please provide an elevation indicating dimensions.	6/3/2003	This is a STL beam t each floor to support wall studs.	N	5	6/11/2003
99	AE2004 sequence 116	Drawing	Reference Drawing AE2004 sequence 116. Please confirm that note 13 Cement Plaster between grids 8 & 8.5 should be note #1 Precast Concrete Panels.	6/3/2003	Note 13 is correct.	N	5	6/11/2003
100	AF1001 or sequence 165	Drawing	Reference Drawing AF1001 or sequence 165. Please confirm if the darkened "L" shaped notation at corners at entrances to ESD rooms indicate the stainless steel bumper rail specified in Section 10260 "Wall and Corner Guards."		Yes - the darkened L notation indicates the stainless steel bumper rails per Specification 10260.	N	5	6/11/2003
102	SF1021	Drawing	Refer to drawing SF1021. What is the top of wall elevation for the wall shown along column line D and 2 (section 14/SF3003)?	6/3/2003	Top of wall is at 153'-0" as shown on AE3001, AE3002 and 5/AE5101.	N	5	6/11/2003
103	exterior metal canopies.	Specification	Please provide a specification for exterior metal canopies.	6/3/2003	These are to be manufactured from details #06 and #07 on AE5101858EL.	N	5	6/11/2003
104	SF1021	Drawing	Refer to drawing SF1021. Beam B2-406 along column line 2 calls for a 18" deep beam. Section 12/SF3003 shows a beam that is greater than 18". Please clarify	6/3/2003	Scheduled beam depth matches the 18" depth matches the 18" depth of the adjacent waffle slab as shown on section 12/SF33. The 1'-" wide extension below the scheduled beam extends down to the top of the curtain wall as shown o the section, and is extension is not schedule.	N	5	6/11/2003
105	SF1021. Section 14/SF3003	Drawing	Refer to drawing SF1021. Section 14/SF3003 along grid line 2 shows an isolated beam that appears to be offset from the column supports. How does this beam tie into the columns?	6/3/2003	Provide eight #5 rebar horizontal dowels with standard 90degree hook each end at each column	N	5	6/11/2003
106	Detail 3 on drawing AE5301	Drawing	Reference Detail 3 on drawing AE5301. The origin of the detail is indicated as Drawing AE1023, but there is nor reference for this detail on this sheet. Please clarify.	6/3/2003	This is located on top of the concrete bridge support wall, located on grid 5.	N	5	6/11/2003

Item	Vol. or Page	Drawing or Section Number	Comment/Question	Date	Response	Attach (Y/N)	Addendum Number	Date Closed
109	07241 Polymer Exterior Wall Finish Coat System	Specification	Reference Specification 07241 Polymer Exterior Wall Finish Coat System. Please clarify the location.	6/3/2003	Not part of MicroLab Project.	N	5	6/11/2003
112	CP1205E13 (Sequence 20) & CP1208E13 (Sequence 23), keynote 3	Section	Reference CP1205E13 (Sequence 20) & CP1208E13 (Sequence 23), keynote 3. The keynotes description is different on each drawing (i.e. primary and parking paving), but reference the same roadway. Please clarify whether this roadway is primary paving section or parking section.	6/3/2003	The notes apply just as they read – it is only a coincidence that they both are numbered as Keyed Note 3 on two different pages. The parking lot shown on Seq 20 is to have a parking lot/trail paving section. The access road south of the lot as shown on Seq 23 is to have a primary paving section,.	N	5	6/11/2003
113	n/a	Specification	Within the specifications there is a TN/TJ6001STD drawing (this is only one of 5 or 6 "TJ" drawings) that is referenced, but is not included in the drawings submitted by Mesa Reprographics. Can these drawings (all "TJ" drawings) be submitted as an addendum.	6/3/2003	Specification Drawing TN/TJ6001STD is included in the "BA1.4 Security/Access Control" drawings as equipment list sheet TY6001STD. However, note that this equipment list applies only to sheets TY5001STD and TY5002STD in the set. The adjacent "STD" sheets were extracted from SNL Facilities standards drawings, therefore the equipment key codes on those sheets do not match the codes on sheet TY6001STD. For those equipment codes, refer to the pertinent SNL Facilities standard drawings.		5	6/11/2003
115	Sequence 005	Sheet	On Sheet Sequence 005 a 4 hour wall is listed but not shown on the plan. I am assuming there is no 4 hour wall. Please confirm.	6/3/2003	No 4 hour wall.	N	5	6/11/2003
116	Comment	General	Please provide a detailed Sealant Schedule.	6/3/2003	In Specification section 07900S, under 2.2, C add: Sealant Schedule: 1. Exterior Locations: a. Wall Joints:1) Bordered on both sides by porous building material (concrete, stone, masonry, exterior insulation and finish systems): Designation Preformed Foam.2) Bordered on both sides by non-porous building material (coated and uncoated metals, anodized aluminum, porcelain tile, and glass): Designation Latex-Silicone, grade NS (protected); Elastomeric—Silicone (non-protected)3) Bordered on one side by porous building material (concrete, stone, masonry) and other side by non-porous building material (coated and uncoated metals, anodized aluminum, porcelain tile, and glass): Designation Preformed Foam, grade	N	5	6/11/2003

Itom	Vol. or Page	Drawing or Section Number	Comment/Question	Date	Response	Attach (Y/N)	Addendum Number	Date Closed
					NS. b. Perimeter of penetrations through walls: Designation Preformed Foam (w/ porous mat.); Elastomeric-Silicone (w/ non-porous mat.)c. Expansion joints in ceilings, soffits, and overhead surfaces: Designation Latex-Silicone.d. Control joints and perimeter of penetrations in ceilings, soffits, and overhead surfaces: Designation Acrylic Latex, grade NS.e. Wall and ceiling joints between frames and their rough opening: Designation Preformed Foam (w/ porous mat.) & Elastomeric-Silicone (w/ non-porous mat.)f. Wall and ceiling joints between frames and adjoining surfaces: Designation Preformed Foam (w/ porous mat.); Elastomeric-Silicone, grade NS (w/ non-porous mat.)G. Joints and perimeter of penetrations in horizontal pedestrian and vehicle traffic surfaces: Designation Elastomeric-Silicone, grade P, class T. h. Exterior wall and ceiling joints over 2 inches in width: Designation Preformed Foam (w/ porous mat.); Elastomeric-Silicone, grade NS (w/ non-porous mat.) 2. Interior Joints:a. Wall and ceiling joints subject to movement: Designation Latex-Silicone.b. Wall and ceiling joints not subject to movement: Designation Latex-Acrylic, grade NS.c. Interior side of exterior openings: Latex-Silicone.d. Floor Joints: Designation Preformed Foam.e. Wall and ceiling joints between frames and their rough opening: Designation Latex-Acrylic, grade NS.f. Wall and ceiling joints between frames and adjoining surfaces: Designation Latex-Acrylic, grade NS.g. Joints indicated to require abuse-resistance and pick-resistance: Designation Preformed Foam.h. Interior Sanitary Joints; Joints Between Plumbing Fixtures and Adjoining Floor, Wall, and Ceiling Surfaces; Joints Between Back Splashes and Wall Substrates: Designation Sanitary Latex-Silicone.			
117	Comment	General	Please provide a detailed Fluid-applied waterproofing schedule.	6/3/2003	To be applied on walls below grade and any horizontal slabs below grade	N	5	6/11/2003
118	Comment	General	Please provide a detailed sheet waterproofing schedule.	6/3/2003	To be applied below horizontal slabs at grade and below.	N	5	6/11/2003
119	15810S	Specification	The index in the specification indicates mechanical division 15810S as Solvent and General Exhaust	6/3/2003	Yes, the Specification is correct, revise the index	N	5	6/11/2003

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			Ductwork but the spec section included is		sheet.	(,		
			titled Ductwork. Do we have the correct specification?					
121	MH series duct drawings	Drawings	The general notes on the MH series duct drawings indicate all duct and equipment suspended from the structure shall be vibrationally isolated per specification 13085 (seismic protection) and also refers to details on sheet MH5001858EL. Also see spec section 15070S (vibration limits & controls) that mainly refers to the MicroFab project. Do all ducts on this project need to be suspended with isolators? What specification should be used to determine the requirements for ductwork isolation?	6/3/2003	All sections of 13085 and 15070S apply to this project.	N	5	6/11/2003
125	Comment	General	Please indicate which offices and labs are classified spaces that will require sound boots on the return grilles per general note 5 on the MH series duct drawings. Will a 1" thick ductboard sound boot be acceptable for this application?	6/3/2003	All offices and labs require sound boots. Provide sound boot as indicated on MH5001898EF.	N	5	6/11/2003
127	AE1008858EL	Drawing	AE1008858EL Shows walls around Stair #5 to be type "L" but on page A13001858EL the partition types have no Type "L" shown they go from J to M What might this wall be?	6/4/2003	Use wall Type E1	N	5	6/11/2003
128	A13001858EL	Drawing	On page A13001858EL Mark A (Typical Demising Partition) wall drawing calls out 2 layers of 5/8" Gyp Brd each side the description calls for 1 layer each side which is right? There are several other areas on this page where drawing and description do not match which takes precedence?	6/4/2003	Use the description.	N	5	6/11/2003
130	04465S	Specification	Spec 04465S Granite. Please provide a location for this granite. If this is supposed to be the spec for the granite that is applied to the composite panels it doesn't match what is called for in the composite stone panel spec. Also I assume it is not the granite on the interior floor as that is spec'd in the stone flooring	6/4/2003	Refer to AF6001858EL for GR-1 and GR-2 product names and locations (floors and counter tops).	N	5	6/11/2003

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131	02250	Specification	Spec 02250 Helical Piers. Please provide location. None shown on dwgs	6/4/2003	Specification Section 02250 does not apply to the MicroLab project.	N	5	6/11/2003
132	AE4008858EL section 6	Drawing	Drawing AE4008858EL section 6 shows a machine room above the freight elevator. Please provide structural details for the machine room.	6/4/2003	For elevator machine room structure see SF1026, SF1033, and 10/SF5004.	N	5	6/11/2003
133	Section 02200 and Drawing S-0001858EL	Specification	Please clarify your response to Item 36 in Amendment #3. Specification Section 02200 and Drawing S-0001858EL do not call for structural fill requirements under the pier caps, grade beams, and slab on grade. The only requirement is for three feet of fill under spread footings. Please provide information.	6/5/2003	No over excavation is called for in specification section 02200 paragraph 3.04 for areas under pier caps, grade beams, or slab on grade; and none is required in these areas. If bearing surface of these components is below existing grade, excavate to bearing surface. If bearing surface is above existing grade, fill is required. In either case, for sub-grade preparation and fill, follow specification section 02200.	N	5	6/11/2003
141	MH6001858EL	Section	Reference: MH6001858EL EHX 1 & 2 Please confirm there is to be no consideration for frost control.	6/4/2003	Due to the low dew point in Albuquerque in winter especially, this is not a concern.	N	5	6/11/2003
142	MH6001858EL	Section	Reference: MH6001858EL Is the Sup LAT (summer) referenced for EHX1&2 the EAT for the Evaporative coil of MA-1 & 2?	6/4/2003	Size evaporation section per scheduled conditions.	N	5	6/11/2003
144	Sheet Sequence 005	Section	1. On Sheet Sequence 005 a 4 hour wall is listed but not shown on the plan. I am assuming there is no 4 hour wall. Please confirm. 2. Please provide a detailed Sealant Schedule. 3. Please provide a detailed Fluid-applied waterproofing schedule. 4. Please provide a detailed sheet waterproofing schedule.	6/4/2003	1. No 4 hour fire wall. 2 & 3. In Specification section 07900S, under 2.2, C add: Sealant Schedule: 1. Exterior Locations: a. Wall Joints:1) Bordered on both sides by porous building material (concrete, stone, masonry, exterior insulation and finish systems): Designation Preformed Foam.2) Bordered on both sides by non-porous building material (coated and uncoated metals, anodized aluminum, porcelain tile, and glass): Designation Latex-Silicone, grade NS (protected); Elastomeric—Silicone (non-protected)3) Bordered on one side by porous building material (concrete, stone, masonry) and other side by non-porous building material (coated)	N	5	6/11/2003

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					and uncoated metals, anodized aluminum, porcelain tile, and glass): Designation Preformed Foam, grade NS. b. Perimeter of penetrations through walls: Designation Preformed Foam (w/ porous mat.); Elastomeric–Silicone (w/ non-porous mat.)c. Expansion joints in ceilings, soffits, and overhead surfaces: Designation Latex-Silicone.d. Control joints and perimeter of penetrations in ceilings, soffits, and overhead surfaces: Designation Acrylic Latex, grade NS.e. Wall and ceiling joints between frames and their rough opening: Designation Preformed Foam (w/ porous mat.) & Elastomeric-Silicone (w/ non-porous mat.)f. Wall and ceiling joints between frames and adjoining surfaces: Designation Preformed Foam (w/ porous mat.); Elastomeric–Silicone, grade NS (w/ non-porous mat.)G. Joints and perimeter of penetrations in horizontal pedestrian and vehicle traffic surfaces: Designation Elastomeric–Silicone, grade P, class T. h. Exterior wall and ceiling joints over 2 inches in width: Designation Preformed Foam (w/ porous mat.); Elastomeric–Silicone, grade NS (w/ non-porous mat.) 2. Interior Joints:a. Wall and ceiling joints subject to movement: Designation Latex-Silicone.b. Wall and ceiling joints not subject to movement: Designation Latex-Silicone.d. Floor Joints: Designation Preformed Foam.e. Wall and ceiling joints between frames and their rough opening: Designation Latex-Acrylic, grade NS.c. Interior side of exterior openings: Latex-Silicone.d. Floor Joints: Designation Latex-Acrylic, grade NS.g. Joints indicated to require abuse-resistance and pick-resistance: Designation Preformed Foam.h. Interior Sanitary Joints; Joints Between Plumbing Fixtures and Adjoining Floor, Wall, and Ceiling Surfaces; Joints Between Back Splashes and Wall Substrates: Designation Sanitary Latex-Silicone.			
146	Volume BA 1.4 (Security and Access Control)	Section	Please reference Volume BA 1.4 (Security and Access Control). TY70011858EL shows a "switch" connected to the ACU's and optical fiber going to the IDR. Can you define this "switch" and provide	6/4/2003	The "switches" shown in the block diagram of TY7001858EL are "not in contract" (N.I.C.). They will be installed and connected by Sandia personnel, will likely be Ethernet-based, and will reside in the	N	5	6/11/2003

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			clairification on how it interconnects to the Infographics access control system.		security monitoring room(s).			
157	Items 25 and 26	Amendment #2	Amendment #2 Items 25 and 26 State that the Laser Interlock is to be provided by Rockwell Laser Systems. I spoke with Rockwell and they do not supply the	6/6/2003	The laser interlock/shutter is part of the laser, it is interlocked so that it shuts the laser dokwn if it is in operation and the door is opened. This is not part of the contract, but will be installed under a separate occupancy contract with the laser equipment.	N	5	6/11/2003
			"Laser Remote Interlock or Shutter" that is shown on TY5001858EL. Nor is there a part number or supplier shown on the drawings.					
			Can Sandia provide a manufacture and part number for this item? At the very least, according to Rockwell Laser International, whomever supplies this item will ask what type of laser, the parameters and power requirements are for the laser.					
158	BA 1.4, drawing GI000685EL	Volume	Please reference Volume BA 1.4, drawing GI000685EL. There is a section at the bottom of the page for telecommunications drawings.	6/6/2003	These are communications drawings which support the security system and is up to the prime contractor as to what sub provides and installs.	N	5	6/11/2003
			Can we get a brief explanation as to why this is listed under telecommunications not security?					
159	BA 1.4	Section	Refer to Volume BA 1.4. The floor plans in this project call for cameras in several locations. There is no mention of a camera system in the Project Manual (section 16720S) or the SFM. Can you give	6/6/2003	Camera equipment is SFM. Exact components are not yet final, but for installation bidding purposes, base the bid on the following components (which are subject to change):	N	5	6/11/2003
			part numbers and description of cameras, lenses, housings, power supplies, and PTZ assemblies.		- PTZ: Philips TC6570PT			
			Who provides this equipment?		- Enclosure: Philips TC9346A			
					- Camera: Philips LTC 0600 Series Color Digital			
					- Zoom Lenses: Philips LTC 3384/3394 series zoom auto-iris	oom		
					- Receiver/driver: Philips LTC 8500 Series			
					- MUX: Philips LTC 2660 Series 16-channel color			

Item	Vol. or Page	Drawing or Section Number	Comment/Question	Date	Response	Attach (Y/N)	Addendum Number	Date Closed
	, con on rago	000101111111111111111111111111111111111		Julio	- Cantilever mounts: generic - Tower mounts: custom fabricated	(1,1.7)	114111201	0.000
160	Comment	General	In the SFM, under the subheading of "Automated entry Control (AECS)", there is a line item for 2 ACU Cabinets. Is this just a cabinet or does it contain Infographics control hardware? If so can we get a parts list of what is in the cabinet?	6/6/2003	The ACU is an Infographics unit ACU2XL/16. It includes the enclosure and all associated electronics. Details of this unit may be seen at www.infographicsystems.com/productinfo.	N	5	6/11/2003
161	BA 1.4	Section	Please reference Volume BA 1.4 (Security and Access Control). Drawing TY5005STD, TY7001STD, TY7003STD and TY7008STD all reference an Intrusion Alarm System containing a multiplexed (MUX) system. This system is not mentioned in the Project Manual, section 16720 but there is a line item for 2 MUX cabinets in the SFM.	6/6/2003	Refer to question # 160. The "MUX" system has been superceded and will be an Infographics system - however, the MUX electronics diagram may be used as a similar level of complexity for installation labor bidding. The Infographics system ACU will replace the MUXs.	N	5	6/11/2003
			Is the security contractor responsible for providing and installing, all or part, of this MUX system? Does the MUX system interface with Infographics Access Control System? If yes please clarify.		1) The prime contractor is responsible for installing all of the Infographics system. SNL personnel will perform final sensor tests and connect the ACUs to an Ethernet-networked (switch) system.			
			Electrical Equipment Identification notes (numbers with the triangle around them) in the above listed drawings do not match the Electrical Equipment List (TY6001STD). Please clarify.		2) Therefore, the MUX system is now the Infographics system. 3) Therefore, electrical equipment I.D. notes and tags (triangles) on the MUX system are invalid. In general, tags on the security and communications items refer to the sec/comm symbols sheet rather than the general electrical symbols sheet.			
163	Section 16269 2.01	Specification	Per specification Section 16269 2.01 ABB is listed as the approved VFC Manufacturer.	6/6/2003	No other manufacturers are approved.	N	5	6/11/2003
			1) What other manufacturer's are listed as					

Item	Vol. or Page	Drawing or Section Number	Comment/Question	Date	Response	Attach (Y/N)	Addendum Number	Date Closed
			approved?			(, , ,		
			2) What is the process for prior approval?					
164	copper/fiber service entrance	Drawings	Need drawings on copper/fiber service entrance feeder cables feeding the building IDR's, size of conductors, and where the feeders originate.	6/6/2003	Copper and fiber building service entrance feeder cables are not in contract (N.I.C.) and will be installed under another contract as these cables terminate at other locations and within other buildings at the site.	N	5	6/11/2003
165	Comment	General	Need IDR layouts for both IDR's on second floor (cable tray, voice/data frames, 200A LIU's, and equipment cabinets).	6/6/2003	Refer to Electrical BA 1.3 standard drawing sheets TN5007STD, TN500(1-6)STD, and T5004STD for typical communications standards details, including general IDR plan and elevation layouts. Specific IDR layouts based upon these standards will be provided after contract award. Each IDR will contain approximately five (5) electronics equipment cabinets.	N	5	6/11/2003
166	Comment	General	Need information on tie cables (copper, and fiber) between both IDR's on second floor Micro Lab.	6/6/2003	Tie cables between the two IDRs will be one (1) 72-fiber single mode cable, one (1) 72-fiber multimode cable (50-micron Lazrspeed), and twenty-four (24) 25-pair CAT-6 copper cables if available (or 150 four-pair CAT-6 cables as an alternate solution).	N	5	6/11/2003
198	EP7001858EL, Seq. 006 and EP5001858EL, Seq. 089	Drawing	On Drawing #EP7001858EL, Seq. 006, Power One-line Diagram and EP5001858EL, Seq. 089, Electrical Power Details, "Main Switchboard SUB-20" appears to be designed as non-drawout, group-mounted circuit breaker construction. Please verify which specification section 16425S-Switchboards or 16426S-Low Voltage Switchgear applies to this switchboard.	6/9/2003	Sub 20 is group mounted switchboard, not LV switchgear and specification 16425S applies.	N	5	6/11/2003
199	Comment	RFQ	A request for a 7 day extension to submit bids for RFQ#4632 - Microlab. The reasons for this request	6/10/2003	The bid period has been extended:	N	5	6/11/2003

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			are twofold: 1) complexity of the project, and 2) need for more local involvement.		Prime contractor technical information, full subcontractor listing and price proposal are due at SNL on Tuesday, June 24, 2003, at 3:00PM. Subcontractor best value technical information is due at SNL on Wednesday, June 25, 2003, at 1:00PM.			
200	DI Polish System	Specification	There are a couple ambiguities in the MicroLab DI Polish System specification First, the consumption and flow rate of the loop: "The MicroLab DI Polish Loop Flow shall have a maximum flow of 31 gpm. This is based upon a future total DI connected load of 62 gpm, at 50% diversity. Therefore the DI transfer pumps and the DI Polish booster pumps shall be able to provide this flow. The DI Polisher loop will be circulated at 10 gpm. The unused DIS water will return to the storage tank." I interpret to mean the consumption is 31 gpm maximum, but I'm not clear on what "circulated at 10 gpm" means. I haven't reviewed the loop piping drawings yet, but I would assume the loop flow, at the booster pumps, should be in the 50 to 60 gpm range. Secondly, the spec for the water quality simply states "18 megohm" and mentions both UF and final cartridge filters. There is no particle spec. I would assume that the spec for this loop should match that of the MicroFab. Also, there's no mention of makeup to this loop, so I would assume that the supplier will need to install a makeup RO/DI. Are these assumptions correct?	6/10/2003	To clarify the flow rates for the DI system, the flow shall be based on a 50% diversity of 62 gpm or 31 gpm total flow rate circulated at about 10 gpm for each floor. The mLab DI system does not match the specifications for the mFab. The mLab DI system shall be a Culligan or equal based on less than 3 ppm dissolved solids and a resistivity of less than 18 mega ohms. System components shall be water softener, reverse osmosis unit with integral pressure boosting pump, storage tank, DI circulating pumps, dual resin bottles with mix bed polishing, final filter, and ultr-violet sterilizer.	N	5	6/11/2003

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201	07160S, 07190S, and 07241S	Specification	Please confirm if specifications sections 07160S, 07190S, and 07241S apply to the MicroLab project, and if so, where. None of the above specifications are labeled or illustrated on the drawings. The individual specification sections do not indicate where they would apply either.	6/10/2003	Specification Section 07160S does not apply to the Microlab. Specification Section 07190S does apply, water repellents are applied to the exterior CIP and precast concrete. Specification Section 07241S does not apply to the Microlab		5	6/11/2003
202	(07140S)	Drawings	The only areas we can find on the drawings that require fluid applied waterproofing (07140S) are at the basement walls. Please clarify that this is the only area that requires fluid applied waterproofing. Specifically, please clarify if the first floor elevator pits require waterproofing.	6/10/2003	The basement walls and elevator pits require waterproofing and protection board.	N	5	6/11/2003
203	Section 09731S Seamless Static Conductive Covering	Specification	Please confirm if specification section 09731S Seamless Static Conductive Covering applies to the MicroLab project, and if so, where.	6/10/2003	Specification Section 09731S does not apply to the Microlab	N	5	6/11/2003
204	Section 07810S and 07814S Interior Intumescent Fireproofing	Specification	Please confirm if specification section 07810S and 07814S Interior Intumescent Fireproofing applies to the MicroLab project, and if so, where.	6/10/2003	Specification Sections 07818S and 07814S does apply to the Microlab. All exposed steel in Design and Education Center, Penthouses and Elevator Equipment Room.	N	5	6/11/2003
205	Section 05800S Expansion Joint Fire Barriers	Specification	Please confirm if specification section 05800S Expansion Joint Fire Barriers applies to the MicroLab project, and if so, where.	6/10/2003	There are no Fire rated expansion joints in the Microlab	N	5	6/11/2003
206	Section 02726S Sewer Manholes	Specification	Please confirm if specification section 02726S Sewer Manholes applies to the MicroLab project, and if so, where.	6/10/2003	Specification 02726S does not apply to the project.	N	5	6/11/2003
207	Sheets AE1028 and AE2101 and Amendments 3	Drawing	Reference the drawing sheets AE1028 and AE2101 and Amendments 3 and 4. The sink/casework units within certain labs are shown in plan view on separate walls from the fume hoods. Typical lab	6/10/2003	Use the floor plans for location of fume hoods and sinks, the typical lab drawing is for reference only.	N	5	6/11/2003

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	and 4		detail 13/AE2101 shows a sink with casework directly adjacent to a fume hood. Are we to assume this 6'-6" sink/casework unit shown on 13/AE2101 is the typical sink with casework shown in plan view on amendment drawing sheet AE1028? If so, are we to assume since the note on AE1028 says "typical" that a sink with casework is to be in all labs or just the ones with the units drawn in them on the plans? Are we also to assume this casework should conform to specification section 12345S?					
208	#4, Item 184	Amendment	Reference amendment 4, item 184. Per the response to this question, we will have exactly 20,000 cubic yards of stockpile removal in our bid unless directed otherwise.	6/10/2003	Contractor to provide a Unit Price (with price proposal) per cubic yard to transport/dump stockpile material within 5 mile radius of the MicroLab site.	N	5	6/11/2003